

IN THE FIGURES

Please replace Figure 1-3 with the attached replacement sheet including those figures, wherein reference numerals are added to corresponding RNCs in Figure 1.

REMARKS

By this Amendment, Figure 1 is corrected to include reference numerals 1 and 2, added to corresponding RNCs in Figure 1. Additionally, the Application is amended to correct the term '2MSC' with the correct term '2GMSC'. Please reconsider the patentability of the rejected claims based on the following arguments. Claims 1, 3-12, 14, 18, 19, 21 and 23-30 are pending.

Claims 23, 24 and 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah (US 6,400,695) in view of Shimojo (US 5,787,072), claims 1, 14, 19, 21, 25-26 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah in view of Shimojo and Edholm (U.S. 6,600,721), claims 3-6, 8-12 and 30 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah in view of Shimojo, Edholm and Newton, and claims 7, 18 and 29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah in view of Shimojo and Williams (US 6,317,455). Applicants traverse the prior art rejections because the cited prior art fails to disclose, teach or suggest all the features recited in the rejected claims. For example, the cited prior art fails to disclose, teach or suggest the claimed layer 2 (L2) flow control information relating to the first and second connection legs being tunnelled through layer 2 (L2) transport protocol (e.g., ATM) of an intermediate second leg which does not support such L2 flow control.

Chuah merely discloses a conventional UMTS access network and UMTS protocol stacks (see, Figs. 1 and 2). Thus, the LAC/LRC/MAC are used in the radio interface Uu and LAC/RLC/IP protocols are used in the interface lub between node B and the radio network controller RNC. ATM (Asynchronous Transfer Mode) may be used in L2 layer at the interface lub.

Thus, as recognized by the Office Action, the RLC/MAC protocols at the radio interface Uu support flow control, whereas the ATM protocol in the layer L2 at the interface lub does not. Accordingly, the radio interface Uu does not correspond to a first connection leg and interface lub does not correspond to an intermediate second connection leg as recited in the rejected claims.

The Office Action has correctly recognized that Chuah's connection between the mobile terminal 2 and node B6 (i.e., the radio interface Uu) corresponds with the claimed first connection leg, and that the connection between the node-P6 and the RNC (i.e. the interface lub) corresponds with the intermediate second connection leg.

However, the Office Action has incorrectly concluded that the connection leg between another user equipment 4 and another node-B6 corresponds with the claimed third connection leg. However, Chuah's leg is also a radio interface Uu in a totally different subnetwork 18. Thus, the connection leg between the user equipment 4 and node B6 has no relationship to the other two connections. As a result, the proposed interpretation of Chuah fails to anticipate the claimed third connection leg in combination with the two first mentioned connections.

The Office Action also asserted that Chuah's node B6, which is located between the radio interface and the link to the RNC, anticipates the first network element of the claimed mobile communications system between the first and second legs, and that the other node B6 which has the radio connection with the user equipment 4, establishes the second element of the mobile communication system between the second and third legs as claimed.

However, this other node B6 is not located between the second leg (which, according to the Office Action's interpretation, is between the first node B6 and the RNC10) and the alleged third connection leg (the second radio connection). The network element 10 to which the alleged second connection leg terminates is the RNC10. Thus, the third connection leg would be a connection on the other side of the RNC10, which is contrary to the Office Action's assertions.

Further, as admitted by the Office Action, Chuah fails to teach or suggest first and second network elements configured to tunnel lower level flow control information through the lower transmission protocol level and the second leg between the first and third legs in order to provide end-to-end flow control and thereby data integrity over the connection on the lower transmission protocol layer. However, the Office Action asserted that those features are taught by Shimojo at column 1, lines 12-14 and column 3, lines 48-57.

Nevertheless, Shimojo merely teaches that ATM nodes, which have no flow control function, suffer from severe disadvantages regarding efficient utilization of network resources. Therefore, Shimojo teaches use of a flow control apparatus that can be connected between input and output ports of an ATM switch. As a result of that connection, the ATM switch node can be easily provided with a flow control function. Thus, Shimojo explicitly teaches away from the invention by teaching that each switch node must be provided with a flow control function.

Thus, if a person skilled in the art had applied teachings of Shimojo in the system of Chuah, he/she would have provided each and every intermediate nodes that did not support flow control initially, with a flow control apparatus providing such support.

As a result, the combined teachings of Chuah and Shimojo would fail to provide the claimed invention wherein layer 2 (L2) flow control information relating to the first and second connection legs is tunnelled through layer 2 (L2) transport protocol of an intermediate second leg which does not support such L2 flow control. This is because the incorporation of Shimojo's teachings in Chuah's system would result in a system wherein all intermediate nodes would support L2 flow control; therefore, such a system would not include any legs that would not support L2 flow control. Accordingly, the combined teachings of Chuah and Shimojo do not render the rejected claims obvious.

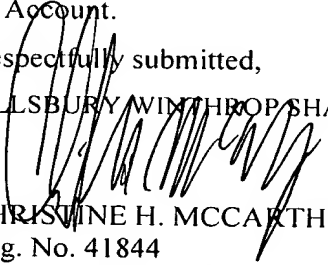
Similarly, none of Edhom, Newton, and Williams remedies the above-identified deficiencies of Chuah analyzed in combination with Shimojo. Accordingly, claims 1, 3-12, 14, 18, 19, 21 and 23-30 are allowable over the cited prior art analyzed individually or in combination.

All objections and rejections having been addressed, Applicants request issuance of a Notice of Allowance indicating the allowability of all pending claims. However, if anything is necessary to place the application in condition for allowance, Applicants request that the Examiner telephone Applicants' undersigned representative at the number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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